

CLAIMS

WHAT IS CLAIMED IS:

1. A radio base station apparatus comprising:

a receiving section for receiving a signal from a terminal via a radio channel assigned

5 to the terminal;

an identifying section for identifying a particular radio base station which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal;

10 a network interface section for delivering the signal to a network when a local station is not the particular radio base station; and

an inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the
15 terminal via the radio channel.

2. A radio base station apparatus comprising:

a receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal;

20 an identifying section for identifying a particular radio base station which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal;

a network interface section for delivering the signal to a network when a local station is not the particular radio base station; and

25 an inter-office interface section for forwarding the signal to the particular radio base station when the local station is not the particular radio base station.

3. A radio base station apparatus comprising:

a network interface section for capturing a signal that is delivered from a network in a physical layer of the network;

an identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to a terminal as a receiving end of the signal during a process of a diversity handover for the terminal;

a transmitting section for transmitting the signal to the terminal via the radio channel; and

an inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station.

4. A radio base station apparatus comprising:

an inter-office interface section for capturing a signal whose destination is a terminal and that have been forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station;

an identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; and

a transmitting section for transmitting the signal to the terminal via the radio channel when the local station is not the particular radio base station.

5. The radio base station apparatus according to claim 1, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section combines the received signal with a signal that is forwarded via the link secured by said inter-office link securing section.

6. The radio base station apparatus according to claim 2, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the particular radio base station, wherein

said inter-office interface section forwards the signal to the particular radio base station via the link secured by said inter-office link securing section.

7. The radio base station apparatus according to claim 3, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section forwards the signal via the link secured by said inter-office link securing section.

8. The radio base station apparatus according to claim 4, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section captures a signal that is forwarded via the link secured by said inter-office link securing section.

9. A base station controller comprising:

a channel controlling section for performing a channel control over a terminal in

cooperation with a radio base station forming a wireless zone where the terminal can visit, and for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, the particular radio base station being to maintain a radio channel assigned to the terminal

5 during a process of a diversity handover for the terminal; and

a network interface section for interfacing with a network under the channel control, the network being a network in which a communication channel is to be formed between said base station controller and the terminal via the radio base station.

10. The base station controller according to claim 9, wherein said channel controlling

10 section performs the channel control such that a radio base station is to be the particular radio base station, the radio base station forming a wireless zone in which the diversity handover is done in a suitable manner for all or part of configuration of a wireless zone, channel allocation, and frequency allocation.